Amendments To The Claims:

Please amend the claims as shown.

1.-9. (canceled)

10. (currently amended) A method for data exchange between network elements, wherein

a first network element is arranged in a first network domain with an address valid in the first network domain, wherein

a second network element is arranged in a second network domain with an address valid in the ~~first~~ second network domain, wherein

a network node device is arranged between the network domains for forwarding a data packet to be sent by the first network element to the second network element, wherein

the data packet comprises a characterizing part and a data part, wherein

a destination address characterizing a receiving network element in the characterizing part of the data packet is translated under the control of the network node device into a destination address valid in the second network domain, the method comprising an address discovery comprising:

sending a message by the first network element to the second network element arranged in the second network domain with a destination address of the second network element that is contained in the data part and is valid in the first network domain;

receiving the message by the second network element and storing the destination address of the second network element valid in the first network domain;

sending a response message by the second network element to the first network element with a destination address of the first network element that is contained in the data part and is valid in the second network domain; and

receiving the response message by the first network element and storing the destination address of the first network element valid in the second network domain,

the method further comprising entering into the data part by the first network element a source address of the first network element valid in the second network domain.

11. (canceled)

12. (previously presented) The method as claimed in claim 10, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the source address to be specified in the data part of the data packet as the source address of the second network element valid in the first network domain.

13. (canceled)

14. (canceled)

15. (canceled)

16. (canceled)

17. (canceled)

18. (canceled)

19. (canceled)

20. (canceled)

21. (canceled)

22. (previously presented) The method as claimed in claim 10, wherein the method is performed by a computer program product when the computer program product is executed on a computer unit assigned to a network element.

23. (cancelled).

24. (canceled)

25. (canceled)

26. (new) The method of claim 10, the address discovery further comprising:

sending a message by the first network element to the second network element arranged in the second network domain with a source address of the first network element that is contained in the data part and is valid in the first network domain;

receiving the message by the second network element and storing the source address of the first network element valid in the first network domain;

sending a response message by the second network element to the first network element with a source address of the second network element that is contained in the data part and is valid in the second network domain; and

receiving the response message by the first network element and storing the source address of the second network element valid in the second network domain.

27. (new) The method as claimed in claim 26, wherein the first network element enters in the data part a destination address of the second network element that is to be specified in the data part of the data packet as the destination address of the second network element valid in the second network domain.

28. (new) The method as claimed in claim 26, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the source address to be specified in the data part of the data packet as the source address of the second network element valid in the first network domain.

29. (new) The method as claimed in claim 27, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the source address to be specified in the data part of the data packet as the source address of the second network element valid in the first network domain.

30. (new) The method as claimed in claim 26 wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the destination address of the first network element to be specified in the data part of the data packet as the destination address valid in the first network domain.

31. (new) The method as claimed in claim 27, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the destination address of the first network element to be specified in the data part of the data packet as the destination address valid in the first network domain.

32. (new) The method as claimed in claim 28, wherein, in order to forward a data packet to be sent by the first network element to the second network element, the first network element enters in the data part the destination address of the second network element to be specified in the data part of the data packet as the destination address valid in the second network domain.

33. (new) The method as claimed in claim 32, wherein, in order to forward a data packet to be sent by the second network element to the first network element, the second network element enters in the data part the destination address of the first network element to be specified in the data part of the data packet as the destination address valid in the first network domain.

34. (new) Computer readable medium comprising program code for performing data exchange between network elements in a system when the program code is executed on a computer unit assigned to the network elements, wherein the system comprises:

a first network element arranged in a first network domain with an address valid in the first network domain;

a second network element arranged in a second network domain with an address valid in the second network domain;

a network node device arranged between the network domains for forwarding a data packet to be sent by the first network element to the second network element, wherein the data packet comprises a characterizing part and a data part,

wherein a destination address characterizing a receiving network element in the characterizing part of the data packet is translated under the control of the network node device into a destination address valid in the second network domain, wherein the code causes the computer to execute an address discovery comprising:

sending a message from the first network element to the second network element arranged in the second network domain with a destination address of the second network element that is valid in the first network domain encoded in the data part;

receiving the message by the second network element and storing the destination address of the second network element valid in the first network domain;

sending a response message from the second network element to the first network element with a destination address of the first network that is valid in the second network domain encoded in the data part; and

receiving the response message by the first network element and storing the destination address of the first network element valid in the second network domain, and and the code then encodes into the data part of data packets a source address of the first network element valid in the second network domain.

35. (new) The computer readable medium comprising program code for performing data exchange between network elements in a system when the program code is executed on a computer unit assigned to the network elements of claim 34, wherein the address discovery further comprises:

sending a message by the first network element to the second network element arranged in the second network domain with a source address of the first network element that is contained in the data part and is valid in the first network domain;

receiving the message by the second network element and storing the source address of the first network element valid in the first network domain;

sending a response message by the second network element to the first network element with a source address of the second network element that is contained in the data part and is valid in the second network domain; and

receiving the response message by the first network element and storing the source address of the second network element valid in the second network domain.